



One Page Summary 2024-2025: Science

Subject Intent

At Northlands, we aim to raise awareness of Science and develop children’s interest and understanding of the world around them. At Northlands Primary School, we recognise that understanding the nature, processes and methods of science is most effectively achieved through a varied and hands-on curriculum.

Our teachers encourage children to be inquisitive throughout their time at the school and beyond. The Science curriculum fosters a healthy curiosity in children about our universe, our planet and promotes respect for the living and non-living. We believe science encompasses the acquisition of knowledge, concepts, skills and positive attitudes. Throughout the programmes of study, the children will acquire and develop the key knowledge that has been identified within each unit and builds upon previous knowledge to promote progress for every child across each year group. The key knowledge identified by each year group is informed by the EYFS framework and national curriculum, and builds towards identified phase ‘end points’ in accordance with NC expectations. Key skills are also mapped for each year group and are progressive throughout the school. These too ensure systematic progression of identified skills with end points which are in accordance with the Working Scientifically skills expectations of the national curriculum. The curriculum is designed to ensure that children are able to acquire key scientific knowledge through practical experiences; using equipment, conducting experiments, building arguments and explaining concepts confidently.

Subject Implementation:

The curriculum is led and overseen by the science lead, who regularly monitors, evaluates and reviews science teaching and learning, celebrating and sharing good practice. Formative assessments will be integrated into every day science teaching to ensure teachers have an in-depth knowledge of the children’s learning and inform their next steps. Low stakes testing of science will also inform termly assessments and allow for long term memory development and secure understanding of skills. The National Curriculum 2014 and the Early Years Foundation Stage statutory framework 2024 provide the basis for our science curriculum, which is then tailored to meet the learning and developmental needs of the children in our school.

Teachers will plan science using a range of high-quality resources to develop progression of skills, allowing children to build upon prior knowledge and understanding. Our progression documents also outline the Working Scientifically skills, which teachers will use to plan enquiry-based lessons which will support children’s journeys to become independent and resilient learners. Science is currently taught for a minimum of one and a half hours per week in every year group.

Monitoring

Regular monitoring of Science will be scheduled termly and consist of:

- Climate walks/book looks
- Checking quality of resources/planning
- Pupil perceptions
- Data analysis

Opportunities to experiment

Every science lesson must have an interesting hook and informative but interesting activity. Practical activities and experiments are encouraged in all lessons which support this

Curriculum Enrichment

At Northlands, we offer a range of writing opportunities to enrich the curriculum such as:

- Themed weeks
- Science Week
- STEM club / nature club

Subject Impact

With the effective implementation of science becoming established across the school, children are becoming more confident at designing and evaluating tests and experiments by the end of Key Stage 2, enabling them to better access the science curriculum in KS3. The successful approach at Northlands results in a fun, engaging, high-quality science education, that provides children with the foundations and knowledge for understanding the world. Regular assessments show the majority of children at Northlands are reaching age-related expectations.